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THE PLANT DISEASE REPORTER

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Division of Mycology and Disease Survey

Supplement 100

Crop Losses from Plant Diseases in the United States

1936

June 10, 1937.

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

CROP LOSSES FROM PLANT DISEASES IN THE UNITED STATES IN 1936

Compiled by

H. A. Edson and Jessie I. Wood

Plant Disease Reporter
Supplement 100 June 10, 1937

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FOREWORD

These estimates have been computed and are presented in the same manner as in previous years (Plant Disease Reporter Supplement 94, 1936). Additions and corrections will be gladly received and revisions will be published in the Reporter.

It may be well to call attention again to the fact that States from which no estimates for a particular crop are received are left out of the calculations for the percentage loss for the country as a whole. This results in a figure that may in some cases be greater, in others smaller, depending upon the crop and the disease, than would be the case if estimates were available from all States. Such completeness is at present not attainable and it is thought that a figure more representative for the country as a whole is obtained in this manner than if the estimates were diluted with the production for States not reporting.

The fact that these estimates are not claimed to be exact may also be emphasized again. In some cases, it is true, counts have been made on which a fairly accurate estimate can be based. In most cases, however, the figures are the result of the combined judgment of pathologists in the various States, based upon their individual observations and reports they have received. If these estimates are sincerely made they do permit comparison of one year with another, which is their main purpose and is all that is claimed for them. If we wait until really exact estimates are obtainable, a record that is of considerable comparative value will have been lost in the meantime.

Comparison of these estimates with those for 1935 show some considerable variations. Some of the more interesting are as follows:

Crop and Disease	Percent loss 1935	1936
Wheat, stem rust	23.	0.4
Barley, stem rust	10.	t
Barley, scab	3.5	t
Oats, crown rust	8.	0.5
Field corn, ear rots except Diplodia	2.8	7.6
Field corn, stalk rots except Diplodia	1.1	3.3
Field corn, Diplodia	1.3	2.5
Apple, scab	14.1	2.8
Pear, blight	13.6	1.6
Peach, leaf curl	4.3	0.2
Cherry, leaf spot	11.9	0.4
Grape, black rot	8.5	3.1

Table 1. Estimated reduction in yield of wheat due to scab (*Gibberella saubinetii*), leaf rust (*Puccinia rubigo-vera tritici*), stem rust (*P. graminis*), bunt (*Tilletia* spp.), loose smut (*Ustilago tritici*), foot rots (various organisms), and other diseases, 1936.

State	Production 1,000 Bushels	Estimated reduction in yield of wheat due to diseases													
		Scab		Leaf Rust		Stem Rust		Bunt		Loose Smut		Foot Rots		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Maine	119	t	+	-	-	t	+	-	-	-	-	-	-	t	+
Mass.		-	-	t	+	1.	+	-	-	-	-	t	+	5.	+
*N. Y.	5,743	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*N. J.	1,281	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	19,615	t	+	13.	3,368	1.5	389	5.3	1,373	2.5	648	t	+	24.3	6,296
Ohio	40,278	t	+	0.1	41	t	+	1.	409	0.5	205	-	-	1.6	655
Ind.	31,042	0.	0	0.	0	t	+	t	+	1.	314	0.	0	1.	314
Ill.	36,435	0.	0	0.5	196	t	+	t	+	0.9	352	t	+	6.9	2,700
Mich.	16,702	0.1	19	0.1	19	t	+	5.	932	5.	932	0.1	19	10.4	1,940
Wis.	1,469	t	+	5.	80	t	+	1.	16	t	+	t	+	8.	128
Minn.	18,721	0.	0	t	+	t	+	0.5	96	1.	192	1.	192	2.5	480
Iowa	9,440	0.5	52	1.	104	0.5	52	1.	104	t	+	1.	104	9.	935
Mo.	31,407	-	-	t	+	t	+	-	-	4.	1,309	-	-	4.	1,309
N. D.	19,235	t	+	t	+	t	+	0.3	59	0.4	78	1.	196	1.7	333
S. D.	4,286	-	-	t	+	t	+	-	-	-	-	-	-	t	+
Nebr.	47,339	-	-	t	+	t	+	-	-	1.	478	-	-	1.	478
Kans.	120,270	t	+	0.2	248	0.5	621	0.3	373	0.2	248	2.	2,485	3.2	3,975
Del.	1,419	t	+	0.5	7	-	-	t	+	t	+	-	-	1.	14
Md.	8,980	1.	94	0.7	66	0.	0	2.	188	1.	94	-	-	4.7	442
Va.	7,862	0.5	43	2.5	217	2.	174	1.	87	2.	174	0.5	43	9.5	825
W. Va.	2,025	t	+	0.5	11	1.	23	2.	45	2.	45	3.	68	10.	226
N. C.	5,194	2.	124	3.	185	-	-	1.	62	2.	124	3.	185	16.	989
*S. C.	1,472	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ga.	1,560	-	-	5.	87	0.1	2	0.1	2	2.	35	-	-	10.2	178
Ky.	5,894	t	+	t	+	t	+	-	-	2.	122	-	-	3.	183
*Tenn.	4,858	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ala.	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Wheat (Continued)

State	Production 1,000 Bushels	Estimated reduction in yield of wheat due to diseases: Scab %	Scab 1,000 Bushels	Leaf Rust %	Leaf Rust 1,000 Bushels	Stem Rust %	Stem Rust 1,000 Bushels	Bunt %	Bunt 1,000 Bushels	Loose Smut %	Loose Smut 1,000 Bushels	Foot Rots %	Foot Rots 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Ark.	595	-	-	t	+	t	+	t	+	1.	6	-	-	1.	6
Okla.	27,520	0.5	155	1.5	464	t	+	3.	928	2.	618	1.	309	11.	3,402
Texas	18,927	t	+	2.	421	t	+	0.1	21	2.	421	4.	842	10.1	2,126
Mont.	13,626	0.	0	t	+	t	+	2.	288	0.3	43	3.	432	5.3	763
Idaho	21,096	0.	0	t	+	2.	454	5.	1,134	-	-	t	+	7.	1,588
Wyo.	1,164	0.	0	t	+	t	+	1.5	18	t	+	t	+	1.5	18
Colo.	10,691	0.	0	t	+	1.	111	3.	334	t	+	0.	0	4.	445
*N. M.	1,023	0.	0	-	-	-	-	-	-	-	-	-	-	-	-
*Ariz.	1,104	0.	0	-	-	-	-	-	-	-	-	-	-	-	-
Utah	4,477	0.	0	0.	0	5.	259	5.	259	2.	104	0.5	26	13.5	700
*Nev.	274	0.	0	-	-	-	-	-	-	-	-	-	-	-	-
*Wash.	46,193	0.	0	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	20,340	0.	0	0.1	22	t	+	2.	432	t	+	3.5	757	5.9	1,276
*Calif.	16,731	0.	0	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	626,461	0.1	487	1.	5,536	0.4	2,085	1.2	7,160	1.1	6,542	1.	5,658	5.7	32,724

* Omitted in calculations for U. S. percentage loss.

Table 2. Estimated reduction in yield of barley due to stripe (*Helminthosporium gramineum*), spot blotch (*Pyrenophora teres*), loose smut (*Ustilago* spp.), covered smut (*Ustilago hordei*), scab (*Gibberella saubinetii*), stem rust (*Puccinia graminis*), and other diseases, 1936.

State	Production	Estimated reduction in yield of barley due to diseases															
		Stripe		Spot Blotch		Loose Smut		Covered Smut		Scab		Stem Rust		All Diseases	
	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Maine	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Vt.	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.		0.	0	0.	0	1.	+	t	+	-	-	1.	+	5.	+
Conn.		-	-	-	-	0.5	+	0.5	+	-	-	-	-	1.	+
*N. Y.	2,718	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*N. J.	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	1,764	0.5	10	1.	20	2.3	46	6.7	134	t	+	t	+	11.5	230
Ohio	520	1.	5	-	-	0.1	1	t	+	t	+	t	+	1.1	6
Ind.	380	t	+	-	-	t	+	t	+	-	-	0.	0	t	+
*Ill.	2,700	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Mich.	3,580	0.1	4	0.1	4	0.2	7	0.2	7	0.1	4	t	+	0.7	26
Wis.	17,896	0.5	95	1.	191	3.	572	0.7	134	t	+	t	+	6.2	1,183
Minn.	31,620	0.5	165	t	+	1.	329	1.5	494	0.	0	0.	0	4.	1,317
Iowa	7,056	3.	231	1.	77	0.5	39	1.	77	t	+	t	+	8.5	655
Mo.	1,360	-	-	-	-	4.	57	1.	14	t	+	0.	0	5.	71
N. D.	4,522	t	+	t	+	0.5	23	t	+	0.	0	0.	0	1.	46
S. D.	8,977	3.	281	-	-	1.	94	t	+	-	-	0.	0	4.	375
*Nebr.	5,520	-	-	-	-	-	-	-	-	-	-	t	+	-	-
Kans.	4,004	t	+	t	+	3.	133	7.	311	t	+	t	+	10.	444
Del.		t	+	-	-	-	-	t	+	-	-	-	-	-	-
Md.	1,000	0.5	5	-	-	2.	22	3.	32	2.	22	t	+	7.5	81
Va.	900	3.	31	1.	10	3.	31	2.5	26	t	+	1.5	15	12.	123
W. Va.	112	1.	1	-	-	2.5	3	3.	4	-	-	t	+	8.5	10
N. C.	153	1.	2	1.	2	2.	3	1.	2	1.	2	-	-	8.	14
Ga.		0.1	+	-	-	1.	+	2.	+	-	-	-	-	5.1	+
Ky.	440	-	-	-	-	3.	14	3.	14	t	+	t	+	6.	28

Barley (Continued)

State	Production 1,000 Bushels	Estimated reduction in yield of barley due to diseases: Stripe %	Stripe 1,000 Bushels	Spot Blotch %	Spot Blotch 1,000 Bushels	Loose Smut %	Loose Smut 1,000 Bushels	Covered Smut %	Covered Smut 1,000 Bushels	Scab %	Scab 1,000 Bushels	Stem Rust %	Stem Rust 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
*Tenn.	432	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark.		t	+	-	-	8.	+	1.	+	-	-	t	+	10.	+
*Okla.	780	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	1,246	0.5	7	0.1	1	2.	27	0.5	7	1.	13	t	+	7.1	95
Mont.	798	1.	9	0.	0	1.	9	2.	17	0.	0	0.	0	8.	70
Idaho	3,432	t	+	0.	0	0.	0	0.5	17	0.	0	-	-	0.5	17
Wyo.	770	t	+	-	-	t	+	2.	16	-	-	t	+	3.	24
Colo.	6,660	t	+	0.	0	3.	213	3.	213	0.	0	t	+	6.	426
*N. M.	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ariz.	726	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah	1,739	t	+	-	-	-	-	2.	36	-	-	t	+	3.5	63
*Nev.	224	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Wash.	2,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	2,970	t	+	0.3	9	t	+	0.2	6	-	-	t	+	5.5	172
*Calif.	29,925	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	147,452	0.8	846	0.3	314	1.5	1,623	1.5	1,561	t	41	t	15	5.1	5,476

* Omitted in calculations for U. S. percentage loss.

Table 3. Estimated reduction in yield of rye due to smut (*Urocystis occulta*), ergot (*Claviceps purpurea*), leaf rust (*Puccinia rubigo-vera secalis*), stem rust (*P. graminis*), and other diseases, 1936.

State	Production	Estimated reduction in yield of rye due to diseases									
		Smut		Ergot		Leaf Rust		Stem Rust		All Diseases	
	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Mass.		0.	0	1.	+	1.	+	2.	+	7.	+
R. I.		-	-	-	-	5.	+	-	-	5.	+
Conn.		-	-	-	-	1.	+	-	-	2.	+
N.Y.	304	-	-	-	-	-	-	-	-	-	-
N.J.	368	-	-	-	-	-	-	-	-	-	-
Pa.	1,260	t	+	t	+	6.	85	t	+	11.	156
Ohio	702	t	+	0.1	+	0.5	4	t	+	0.6	4
Ind.	1,188	0.	0	t	+	0.	0	0.	0	t	+
Ill.	862	t	+	0.	0	t	+	0.	0	t	+
Mich.	1,622	t	+	t	+	t	+	t	+	0.5	8
Wis.	2,100	t	+	t	+	3.	65	t	+	3.5	76
Minn.	4,325	t	+	t	+	0.	0	0.	0	t	+
Iowa	1,050	t	+	t	+	t	+	t	+	1.	11
Mo.	225	-	-	-	-	t	+	0.	0	t	+
N. D.	2,448	0.	0	t	+	0.	0	0.	0	t	+
S. D.	1,608	-	-	2.	33	-	-	0.	0	2.	33
Nebr.	3,442	-	-	-	-	-	-	0.	0	-	-
Kans.	609	-	-	-	-	0.	0	0.	0	0.	0
Del.	46	-	-	-	-	t	+	-	-	t	+
Md.	188	-	-	-	-	-	-	-	-	-	-
Va.	418	-	-	t	+	1.	4	1.	4	2.5	10
W. Va.	104	t	+	t	+	0.5	+	0.	0	4.	4
N. C.	390	-	-	-	-	t	+	-	-	8.	34
*S. C.	75	-	-	-	-	-	-	-	-	-	-
Ga.	99	-	-	-	-	0.1	+	-	-	3.1	3
*Ky.	198	-	-	-	-	-	-	-	-	-	-
*Tenn.	176	-	-	-	-	-	-	-	-	-	-
Ark.		-	-	-	-	t	+	t	+	t	+
*Okla.	144	-	-	-	-	-	-	-	-	-	-
Texas	28	t	+	0.	0	1.	+	t	+	6.	2
Mont.	90	0.	0	t	+	0.	0	0.	0	t	+
*Idaho	88	-	-	-	-	-	-	-	-	-	-
Wyo.	138	-	-	-	-	-	-	t	+	t	+
*Colo.	232	-	-	-	-	-	-	0.	0	-	-
*Utah	12	-	-	-	-	-	-	-	-	-	-
*Wash.	189	-	-	-	-	-	-	-	-	-	-
Oreg.	700	0.	0	t	+	0.1	1	t	+	0.4	3
*Calif.	126	-	-	-	-	-	-	-	-	-	-
U. S.	25,554	t	+	0.2	33	0.8	159	t	4	1.7	344

*Omitted in calculations for U. S. percentage loss.

Table 4. Estimated reduction in yield of oats due to smuts (*Ustilago avenae* and *U. levis*), stem rust (*Puccinia graminis*), crown rust (*P. coronata*), and other diseases, 1936.

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases: Smuts %	Smuts 1,000 Bushels	Stem Rust %	Stem Rust 1,000 Bushels	Crown Rust %	Crown Rust 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Maine	4,130	5.	217	-	-	-	-	5.	217
N.H.	342	1.	3	-	-	-	-	1.	3
*Vt.	2,028	-	-	-	-	-	-	-	-
Mass.	170	5.	9	1.	2	t	+	6.	11
*R.I.	64	-	-	-	-	-	-	-	-
Conn.	162	2.	3	-	-	1.	2	3.5	6
*N.Y.	18,392	-	-	-	-	-	-	-	-
*N.J.	1,568	-	-	-	-	-	-	-	-
Pa.	24,009	10.	2,760	t	+	t	+	13.	3,588
Ohio	40,535	3.5	1,470	t	+	t	+	3.5	1,470
Ind.	38,502	2.	786	t	+	-	-	2.	786
Ill.	99,688	1.5	1,660	t	+	0.5	553	10.	11,067
Mich.	32,181	1.5	491	t	+	0.1	33	1.7	557
Wis.	59,520	5.	3,166	t	+	1.	633	6.	3,799
Minn.	94,376	3.	2,934	t	+	0.	0	3.5	3,423
Iowa	161,955	2.	3,428	0.5	857	t	+	5.5	9,426
Mo.	29,330	10.	3,259	t	+	t	+	10.	3,259
N.D.	4,730	t	+	t	+	t	+	0.5	24
S.D.	12,712	1.	128	t	+	t	+	1.	128
*Nebr.	19,067	-	-	t	+	-	-	-	-
Kans.	32,186	20.	8,047	t	+	t	+	20.	8,047
Del.	61	0.5	+	-	-	t	+	0.5	+
Md.	1,131	5.	61	t	+	2.	24	7.	85
Va.	1,287	3.5	49	1.5	21	2.5	35	8.	112
W.Va.	1,206	5.	65	t	+	1.	13	7.	91
N.C.	3,430	2.	75	-	-	3.	113	9.	339
*S.C.	8,473	-	-	-	-	-	-	-	-
Ga.	6,948	3.	229	-	-	4.	305	9.	687
*Fla.	128	-	-	-	-	-	-	-	-
Ky.	1,053	5.	55	0.	0	t	+	5.	55
*Tenn.	924	-	-	-	-	-	-	-	-
*Ala.	1,870	-	-	-	-	-	-	-	-
*Miss.	1,300	-	-	-	-	-	-	-	-
Ark.	3,075	2.	63	t	+	t	+	2.	63
La.	1,120	1.	13	3.5	46	10.	132	15.	198
Okla.	20,320	10.	2,322	t	+	1.5	348	12.5	2,962
Texas	22,552	4.	1,074	t	+	8.	2,148	16.	4,296
Mont.	2,244	5.	122	0.	0	0.	0	8.	195
Idaho	4,716	t	+	t	+	0.	0	t	+
Wyo.	1,474	5.	78	t	+	-	-	5.	78
Colo.	4,256	5.	224	t	+	t	+	5.	224
*N.M.	400	-	-	-	-	-	-	-	-
*Ariz.	300	-	-	-	-	-	-	-	-
Utah	1,050	2.	22	t	+	-	-	2.5	28
*Nev.	76	-	-	-	-	-	-	-	-
*Wash.	8,517	-	-	-	-	-	-	-	-
Oreg.	11,492	0.4	49	1.5	185	1.5	185	6.6	813
*Calif.	4,080	-	-	-	-	-	-	-	-
U. S.	789,100	3.9	32,862	0.1	1,111	0.5	4,524	6.6	55,977

* Omitted in calculations for U. S. percentage loss.

FIELD CORN

Table 5. Estimated reduction in yield of field corn due to smut (Ustilago zeae), root rots (various organisms), ear rots and stalk rots (various organisms other than Diplodia), ear and stalk rots (Diplodia zeae), bacterial wilt (Aplanobacter stewarti), and other diseases, 1936.

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases													
		Smut		Root Rots		Ear Rots (except Diplodia)		Stalk Rots (except Diplodia)		Diplodia		Bacterial Wilt		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Maine	468	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
*N. H.	656	t	+	-	-	-	-	-	-	-	-	-	-	-	-
*Vt.	2,964	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.	1,638	2.	35	2.	35	t	+	t	+	2.	35	0.	0	6.	105
*R. I.	342	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Conn.	1,938	2.	40	-	-	-	-	-	-	-	-	-	-	2.5	50
*N. Y.	19,840	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*N. J.	7,373	-	-	-	-	-	-	-	-	t	+	-	-	-	-
Pa.	54,572	4.	2,662	t	+	8.	5,324	5.	3,328	t	+	t	+	18.	11,980
Ohio	121,605	3.5	4,528	t	+	1.	1,294	1.	1,294	0.5	647	t	+	6.	7,763
Ind.	115,413	0.5	614	2.	2,456	1.5	1,842	1.	1,228	1.	1,228	-	-	6.	7,368
Ill.	217,751	3.7	14,569	6.	23,626	23.5	92,534	10.	39,376	1.5	5,906	0.	0	44.7	176,011
Mich.	36,750	4.5	1,744	-	-	0.4	155	-	-	0.3	116	0.	0	5.2	2,015
Wis.	44,080	1.5	715	t	+	1.	477	5.	2,383	t	+	0.	0	7.5	3,575
Minn.	88,331	7.	6,758	1.	965	0.5	483	t	+	t	+	0.	0	8.5	8,206
Iowa	212,240	5.	13,433	3.	8,060	3.	8,060	0.	0	10.	26,866	0.	0	21.	56,419
*Mo.	40,032	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
N. D.	2,530	1.	26	t	+	0.5	13	0.5	13	-	-	0.	0	2.	52
S. D.	8,446	10.	1,030	-	-	8.	824	-	-	-	-	0.	0	18.	1,854
*Nebr.	26,859	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	11,036	1.	112	t	+	0.5	56	t	+	0.	0	0.	0	1.5	168
Del.	4,118	t	+	1.	42	0.5	21	-	-	t	+	-	-	1.5	63
Md.	18,396	-	-	2.	387	1.5	290	1.	194	0.5	97	t	+	5.	968
Va.	30,014	3.	995	1.	332	1.	332	1.5	497	1.	332	0.5	166	9.5	3,151
W. Va.	11,569	2.	284	10.	1,420	3.	426	1.	142	0.5	71	-	-	18.5	2,627

Field Corn (Continued)

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases: Smut		Root Rots		Ear Rots (except Diplodia)		Stalk Rots (except Diplodia)		Diplodia		Bacterial Wilt		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
N. C.	4[illegible]	3.	1,553	2.	1,035	2.	1,035	3.	1,553	t	+	-	-	16.	8,281
*S. C.	2[illegible]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ga.	[illegible]	3.	1,173	3.	1,173	1.	391	1.	391	2.	782	-	-	14.	5,474
*Fla.	7[illegible]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ky.	54,486	1.	559	-	-	t	+	t	+	1.5	838	-	-	2.5	1,397
*Tenn.	57,160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ala.	41,162	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	39,570	2.	808	-	-	-	-	-	-	-	-	-	-	2.	808
*Ark.	26,738	t	+	-	-	-	-	-	-	-	-	-	-	-	-
La.	20,734	0.5	104	-	-	-	-	-	-	-	-	-	-	0.5	104
Okla.	11,772	1.	133	0.5	67	3.	399	1.	133	3.	399	-	-	11.5	1,530
Texas	63,915	0.5	392	3.	2,353	8.	6,274	3.	2,353	2.	1,568	t	+	18.5	14,508
*Mont.	54[illegible]	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Idaho	957	t	+	0.	0	0.	0	0.	0	0.	0	0.	0	t	+
Wyo.	984	1.	10	-	-	-	-	-	-	-	-	0.	0	1.	10
Colo.	11,169	6	721	t	+	1.	120	0.	0	0.	0	0.	0	7.	841
*N. M.	2,185	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
*Ariz.	490	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Utah	525	2.	11	-	-	-	-	-	-	-	-	0.	0	2.5	14
*Nev.	52	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
*Wash.	1,054	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Oreg.	1,922	t	+	0.1	2	0.	0	0.	0	0.	0	0.	0	0.2	4
*Calif.	2,178	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
U. S.	1,524,217	3.4	52,[illegible]	2.7	41,953	7.6	120,350	3.3	52,885	2.5	38,885	t	166	20.	315,346

* Omitted in calculations for U. S. percentage total.

Table 6. Sweet corn for manufacture; estimated reduction in yield of sweet corn due to smut (Ustilago zeae), bacterial wilt (Aplanobacter stewarti), stalk and ear rots (Diplodia zeae), and other diseases, 1936.

State	Production Short Tons	Estimated reduction in yield due to diseases: Smut %	Smut Short Tons	Bacterial Wilt %	Bacterial Wilt Short Tons	Diplodia %	Diplodia Short Tons	All Diseases %	All Diseases Short Tons
Maine	60,800	t	+	0.	0	t	+	t	+
*N. H.	2,700	-	-	t	+	-	-	-	-
*Vt.	3,200	-	-	-	-	-	-	-	-
Mass.		6.	+	t	+	2.	+	17.	+
R. I.		t	+	-	-	-	-	-	-
Conn.		3.	+	t	+	-	-	3.5	+
N. Y.	37,300	2.	761	t	+	-	-	2.	761
N. J.		-	-	t	+	-	-	-	-
Pa.	21,100	6.	1,407	t	+	3.	703	10.	2,344
Ohio	37,300	1.	377	0.1	38	t	+	1.1	415
Ind.	39,600	5.	2,084	t	+	t	+	5.	2,084
*Ill.	117,000	-	-	-	-	-	-	-	-
Mich.	5,800	5.	306	0.	0	0.1	6	5.2	318
Wis.	25,200	5.	1,400	t	+	5.	1,400	10.	2,800
Minn.	100,000	7.	7,609	0.	0	t	+	8.	8,696
Iowa	41,200	7.	3,315	t	+	3.	1,421	13.	6,157
N. D.		1.	+	0.	0	-	-	1.5	+
Kans.		t	+	0.	0	0.	0	t	+
Del.	10,600	0.5	54	-	-	-	-	1.	108
Md.	78,200	1.	833	0.1	83	-	-	6.1	5,080
Va.		1.	+	1.5	+	0.5	+	3.5	+
W. Va.		3.	+	3.	+	0.5	+	14.5	+
Ky.		-	-	t	+	-	-	-	-
*Tenn.	6,800	-	-	-	-	-	-	-	-
Texas		10.	+	3.	+	3.	+	21.	+
Idaho		t	+	0.	0	0.	0	t	+
Wyo.		t	+	0.	0	-	-	-	-
Colo.		5.	+	0.	0	0.	0	5.	+
Oreg.		-	-	0.	0	-	-	0.5	+
**Other States	18,300	-	-	-	-	-	-	-	-
U. S.	605,100	3.7	18,146	t	121	0.7	3,530	5.9	28,763

* Omitted in calculations for U. S. percentage loss.

** Includes Colorado, Idaho, Kansas, Kentucky, Missouri, Montana, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, and Wyoming.

SWEET POTATO

Table 7. Estimated reduction in yield of sweet potato due to stem rot (*Fusarium* spp.), foot rot (*Plenodomus destruens*), black rot (*Ceratostomella fimbriata*), and other diseases, and estimated loss from storage rots (various organisms), 1936.

State	Production	Estimated reduction in yield due to diseases									
		Stem Rot		Foot Rot		Black Rot		All Diseases		Storage Rots	
	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Conn.		t	+	-	-	t	+	-	-	-	-
N.J.	2,400	3.	77	-	-	2.	52	7.	181	5.	120
Pa.		t	+	1.5	+	t	+	1.5	+	2.	+
*Ind.	320	t	+	-	-	-	-	-	-	-	- *
*Ill.	300	-	-	-	-	-	-	-	-	-	- *
Iowa	225	30.	97	0.	0	0.	0	30.3	98	-	- *
*Mo.	754	-	-	-	-	-	-	-	-	-	- *
Kans.	240	6.	15	-	-	t	+	7.	18	4.	10
Del.	910	1.	9	-	-	0.5	5	3.5	33	8.	73
Md.	1,200	2.	26	t	+	2.	26	8.	104	8.	96
Va.	4,366	7.	336	t	+	2.	96	9.	432	10.	437
N.C.	7,560	15.	1,418	-	-	t	+	20.	1,891	15.	1,134
S.C.	4,845	-	-	-	-	2.	102	5.	255	-	- *
Ga.	6,630	-	-	-	-	2.	135	2.	135	10.	663
*Fla.	1,235	-	-	-	-	-	-	-	-	-	- *
Ky.	1,342	15.	246	-	-	3.	49	18.	295	2.	268
*Tenn.	3,696	-	-	-	-	-	-	-	-	-	- *
Ala.	6,160	-	-	-	-	2.	126	2.	126	10.	616
*Miss.	6,474	t	+	-	-	-	-	-	-	10.	647
Ark.	2,145	2.	45	-	-	2.	45	4.	90	10.	215
La.	7,797	t	+	-	-	2.	161	3.	211	-	- *
Okla.	525	2.	11	3.	17	1.	6	8.	45	20.	105
Texas	3,640	1.	46	0.	0	10.	461	21.	968	12.	437
*Calif.	1,380	-	-	-	-	-	-	-	-	-	- *
U.S.	64,144	4.2	2,326	t	17	2.3	1,264	8.9	4,912	11.1	4,821

* Omitted in calculations for U. S. percentage loss.

POTATO

Table 8. Estimated reduction in yield of potato due to mosaic (virus), leaf roll (virus), late blight (*Phytophthora infestans*), Rhizoctonia (*Corticium vagum*).

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases: Mosaic %	Mosaic 1,000 Bushels	Leaf Roll %	Leaf Roll 1,000 Bushels	Late Blight %	Late Blight 1,000 Bushels	Rhizoctonia %	Rhizoctonia 1,000 Bushels
Maine	44,000	2.	1,048	1.	524	6.	3,143	2.	1,048
N. H.	1,666	5.	94	2.	37	1.	19	1.	19
Vt.	2,392	3.	111	5.	185	7.	259	7.	259
Mass.	2,415	3.	93	3.	93	3.	93	8.	248
*R. I.	720	-	-	-	-	-	-	-	-
Conn.	2,839	1.	30	-	-	-	-	0.5	15
*N. Y.	26,400	-	-	-	-	-	-	-	-
*N. J.	9,130	-	-	-	-	-	-	-	-
Pa.	26,268	3.	983	5.	1,638	t	+	2.	655
Ohio	14,040	0.5	86	5.	861	t	+	2.	345
Ind.	4,617	3.	153	2.	102	-	-	0.5	26
*Ill.	2,666	-	-	-	-	-	-	-	-
Mich.	26,125	0.2	64	1.	319	t	+	5.	1,593
Wis.	20,090	t	+	0.	0	0.	0	t	+
Minn.	12,502	5.	781	-	-	0.	0	3.	469
Iowa	3,551	8.	379	7.	331	0.	0	3.	142
*Mo.	2,860	-	-	-	-	-	-	-	-
N. D.	5,170	1.	55	1.	55	0.	0	1.	55
S. D.	783	1.	11	1.	11	0.	0	2.	23
*Nebr.	4,730	-	-	-	-	-	-	-	-
Kans.	1,710	t	+	-	-	-	-	5.	93
Del.	475	0.5	2	0.5	2	-	-	t	+
Md.	2,940	1.5	51	2.	68	0.5	17	2.	68
Va.	7,380	2.	178	2.	178	0.	0	1.	89
W. Va.	1,920	4.	128	12.	384	t	+	4.	128
N. C.	5,986	1.	68	2.	136	t	+	3.	204
*S. C.	1,656	-	-	-	-	-	-	-	-
Ga.	768	1.	9	0.1	1	0.1	1	2.	17
Fla.	2,349	1.	26	-	-	4.	105	2.	53
Ky.	1,692	t	+	t	+	0.	0	5.	91
*Tenn.	1,480	-	-	-	-	-	-	-	-
*Ala.	2,784	-	-	-	-	-	-	-	-
*Miss.	1,088	-	-	-	-	-	-	-	-
*Ark.	2,365	-	-	-	-	-	-	-	-
La.	2,652	3.	83	-	-	-	-	-	-
Okla.	2,112	-	-	-	-	0.	0	0.	0
Texas	2,860	2.	77	1.	38	t	+	1.	38
Mont.	1,520	4.	69	0.	0	0.	0	2.	35
Idaho	22,260	4.	937	t	+	0.	0	t	+
Wyo.	1,365	2.	32	t	+	t	+	3.	48
Colo.	18,500	t	+	0.	0	0.	0	1.	193
*N. M.	450	-	-	-	-	-	-	-	-
*Ariz.	180	-	-	-	-	-	-	-	-
Utah	1,830	3.	68	2.	45	0.	0	8.	182
*Nev.	406	-	-	-	-	-	-	-	-
*Wash.	8,010	-	-	-	-	-	-	-	-
Oreg.	7,310	5.	440	7.	616	t	+	5.	440
*Calif.	12,985	-	-	-	-	-	-	-	-
U. S.	329,997	2.	6,056	1.9	5,624	1.2	3,637	2.2	6,576

* Omitted in calculations for U. S. percentage loss.

POTATO (Continued)

Blackleg (Bacillus phytophthorus), Fusarium wilt (Fusarium spp.), tipburn and hopperburn (non-parasitic and leaf hopper), early blight (Alternaria solani), scab (Actinomyces scabies), and other diseases, 1936.

State	Estimated reduction in yield due to diseases											
	Blackleg		Fusarium Wilt		Tipburn and Hopperburn		Early Blight		Scab		All Diseases	
	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Maine	2.	1,048	-	-	1.	524	1.	524	1.	524	16.	8,383
N.H.	1.	19	-	-	-	-	t	+	1.	19	11.	207
Vt.	0.2	7	0.1	4	10.	370	1.5	55	1.5	55	35.3	1,305
Mass.	t	+	-	-	3.	93	0.5	15	0.5	15	22.	681
R.I.	-	-	-	-	-	-	-	-	-	-	-	-
Conn.	1.	30	0.5	15	1.	30	-	-	1.	30	5.	150
N.Y.	-	-	-	-	-	-	-	-	-	-	-	-
N.J.	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	t	+	2.	655	2.	655	0.5	164	0.3	98	19.8	6,486
Ohio	0.5	86	2.	345	6.	1,034	1.	172	1.5	258	18.5	3,187
Ind.	-	-	-	-	-	-	-	-	4.	204	9.5	485
Ill.	-	-	-	-	-	-	-	-	-	-	-	-
Mich.	2.5	797	1.	319	5.	1,593	0.2	64	2.5	797	18.	5,737
Wis.	t	+	t	+	10.	2,511	5.	1,256	4.	1,005	20.	5,023
Minn.	t	+	4.	625	5.	781	t	+	2.	312	20.	3,125
Iowa	0.	0	1.	47	5.	237	0.5	24	0.5	24	25.	1,184
Mo.	-	-	-	-	-	-	-	-	-	-	-	-
N.D.	1.	55	1.5	83	0.5	28	0.	0	t	+	6.	331
S.D.	t	+	10.	114	10.	114	0.	0	2.	23	31.	353
Nebr.	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	0.5	9	t	+	-	-	-	-	0.5	9	8.	148
Del.	-	-	+	+	0.5	2	0.5	2	t	+	2.	8
Md.	t	+	1.5	51	1.	34	1.	34	4.	136	13.5	459
Va.	1.	89	-	-	2.	178	t	+	7.	622	17.	1,512
W.Va.	3.	96	1.	32	8.	256	t	+	0.5	16	40.	1,280
N.C.	t	+	1.	68	3.	204	1.	68	1.	68	12.	816
S.C.	-	-	-	-	-	-	-	-	-	-	-	-
Ga.	2.	17	-	-	1.	9	5.	43	0.1	1	11.3	98
Fla.	1.	26	0.5	13	-	-	t	+	0.5	13	10.5	275
Ky.	t	+	t	+	1.	18	t	+	0.5	9	7.	127
Tenn.	-	-	-	-	-	-	-	-	-	-	-	-
Ala.	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	t	+	-	-	-	-	-	-	-	-	-	-
La.	-	-	t	+	-	-	t	+	t	+	4.	111
Okla.	3.	71	5.	119	-	-	1.	24	2.	47	11.	261
Texas	0.1	4	0.1	4	0.5	19	5.	192	10.	385	25.7	988
Mont.	t	+	2.	35	t	+	t	+	2.	35	12.	209
Idaho	1.	234	t	+	0.	0	t	+	t	+	5.	1,171
Wyo.	2.	32	4.	63	-	-	t	+	-	-	14.	223
Colo.	t	+	1.	193	0.	0	2.	385	t	+	4.	771
N.M.	-	-	-	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-	-	-
Utah	t	+	1.	23	-	-	t	+	0.5	11	19.5	443
Nev.	-	-	-	-	-	-	-	-	-	-	-	-
Wash.	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	t	+	-	-	-	-	t	+	-	-	17.	1,496
Calif.	-	-	-	-	-	-	-	-	-	-	-	-
U.S.	0.9	2,620	0.9	2,808	2.9	8,690	1.	3,022	1.6	4,717	15.7	47,033

TOMATOES

Table 9. Tomatoes for manufacture; estimated reduction in yield due to blight (Septoria lycopersici), Fusarium wilt (Fusarium lycopersisi), early blight (Alternaria solani), nailhead spot (Macrosporium tomato), blossom-end rot (non-parasitic), curly-top (virus), and other diseases, 1936.

State	Production Short Tons°	Estimated reduction in yield due to diseases: Septoria Blight %	Septoria Blight Short Tons	Fusarium Wilt %	Fusarium Wilt Short Tons	Bacterial Wilt %	Bacterial Wilt Short Tons	Early Blight %	Early Blight Short Tons	Nailhead Spot %	Nailhead Spot Short Tons	Blossom-end Rot %	Blossom-end Rot Short Tons	Curly-top %	Curly-top Short Tons	All Diseases %	All Diseases Short Tons
Conn.		1.	+	0.5	+	-	-	1.	+	-	-	-	-	0.	0	4.5	+
*N.Y.	121,400	t	+	-	-	-	-	t	+	-	-	-	-	0.	0	-	-
*N.J.	244,200	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Pa.	93,200	1.	1,277	2.	2,553	1.	1,277	8.	10,214	-	-	12.	15,321	0.	0	27.	34,472
Ohio	78,800	t	+	3.	2,612	0.5	435	1.	871	0.5	435	2.	1,741	0.	0	9.5	8,271
Ind.	373,600	-	-	1.5	5,994	-	-	4.	15,983	-	-	-	-	0.	0	6.5	25,973
Ill.	27,800	t	+	1.	302	t	+	2.	604	-	-	-	-	0.	0	3.	2,417
Mich.	28,200	3.	951	t	+	0.	0	t	+	-	-	5.	1,584	0.	0	11.	3,486
Wis.		10.	+	t	+	0.	0	10.	+	t	+	2.	+	0.	0	23.5	+
Minn.		t	+	t	+	0.	0	t	+	0.	0	3.	+	0.	0	4.	+
Iowa	9,200	1.	103	t	+	0.	0	0.	0	0.	0	8.	827	0.	0	11.	1,137
*Mo.	1,100	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Kans.		-	-	1.	+	-	-	-	-	-	-	-	-	0.	0	1.	+
Del.	61,100	1.	633	0.5	317	-	-	t	+	-	-	t	+	0.	0	3.5	2,216
Md.	297,000	0.1	386	1.	3,857	t	+	5.2	20,057	-	-	5.	19,286	0.	0	23.	88,715
Va.	55,400	1.	68	10.	684	3.	205	2.	137	0.	0	0.	0	0.	0	19.	1,299
W.Va.		1.	+	2.	+	-	-	t	+	-	-	3.	+	0.	0	9.	+
N.C.		3.	+	3.	+	5.	+	-	-	2.	+	5.	+	0.	0	23.	+
Ga.		0.1	+	7.	+	0.1	+	5.	+	0.1	+	30.	+	0.	0	47.3	+
Fla.		-	-	2.	+	t	+	3.	+	1.5	+	-	-	0.	0	8.5	+
Ky.	5,700	t	+	3.	211	0.	0	0.	0	t	+	15.	1,056	0.	0	19.	1,337
*Tenn.	10,100	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Miss.		-	-	1.	+	1.	+	1.	+	-	-	20.	+	0.	0	33.	+
Ark.	2,300	t	+	t	+	-	-	t	+	-	-	2.	47	0.	0	2.	47
La.		t	+	3.	+	t	+	2.	+	-	-	t	+	0.	0	6.	+

Tomatoes (Continued)

State	Production Short Tons°	Estimated reduction in yield due to diseases																	
		Septoria Blight		Fusarium Wilt		Bacterial Wilt		Early Blight		Nailhead Spot		Blossom-end Rot		Curly-top		All Diseases	
		%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons
Okla.		3.	+	20.	+	2.	+	1.	+	0.5	+	3.	+	0.	0	29.5	+
Texas		3.	+	5.	+	0.5	+	2.	+	0.	0	5.	+	0.5	+	16.	+
Idaho		0.	0	0.	0	0.	0	0.	0	0.	0	2.	+	25.	+	27.	+
Colo.	22,700	t	+	t	+	0.	0	2.	522	0.	0	1.	261	3.	783	13.	3,392
Utah	58,500	-	-	t	+	-	-	-	-	-	-	t	+	12.	8,561	18.	12,841
Oreg.		-	-	-	-	-	-	-	-	-	-	-	-	20.	+	20.	+
*Calif.	418,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
**Other States	66,900																
U. S.	1,975,900	0.3	3,418	1.2	16,530	0.1	1,917	3.5	48,388	t	435	2.9	40,123	0.7	9,344	13.5	185,603

° Short tons, 2,000 pounds.

* Omitted in calculations for U. S. percentage loss.

** Includes Alabama, Connecticut, Florida, Georgia, Idaho, Kansas, Louisiana, Minnesota, Mississippi, Nebraska, New Mexico, North Carolina, Oklahoma, Oregon, South Carolina, Texas, Washington, West Virginia, and Wisconsin.

Table 10. Tomatoes for market; estimated reduction in yield due to blight (Septoria lycopersici), Fusarium wilt (Fusarium lycopersici), early blight (Alternaria solani), nailhead spot (Macrosporium tomato), blossom-end rot (non-parasitic), curly-top (virus), and other diseases, 1936.

State	Production 1,000 °Bushels	Estimated reduction in yield due to diseases: Septoria Blight %	Septoria Blight 1,000 Bushels	Fusarium Wilt %	Fusarium Wilt 1,000 Bushels	Bacterial Wilt %	Bacterial Wilt 1,000 Bushels	Early Blight %	Early Blight 1,000 Bushels	Nailhead Spot %	Nailhead Spot 1,000 Bushels	Blossom-end Rot %	Blossom-end Rot 1,000 Bushels	Curly-top %	Curly-top 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Maine		t	+	-	-	-	-	t	+	-	-	t	+	0.	0	t	+
Mass.		1.	+	t	+	0.	0	7.	+	-	-	2.	+	0.	0	14.	+
R.I.		t	+	-	-	-	-	10.	+	1.	+	-	-	0.	0	12.	+
Conn.		1.	+	0.5	+	-	-	1.	+	-	-	0.1	+	0.	0	3.6	+
*N.Y.	1,332	t	+	-	-	-	-	t	+	-	-	-	-	0.	0	-	-
*N.J.	2,310	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Pa.	430	1.	6	2.	12	1.	6	8.	47	-	-	12.	71	0.	0	27.	160
Ohio	352	t	+	3.	12	0.5	2	1.	4	0.5	2	2.	8	0.	0	9.5	38
Ind.	560	-	-	1.5	9	-	-	4.	24	-	-	-	-	0.	0	6.5	39
Ill.	52	t	+	1.	1	t	+	2.	1	-	-	-	-	0.	0	8.	5
Mich.	480	3.	16	t	+	0.	0	t	+	-	-	5.	27	0.	0	11.	59
Wis.		10.	+	t	+	0.	0	10.	+	t	+	2.	+	0.	0	23.5	+
Minn.		t	+	t	+	0.	0	t	+	0.	0	3.	+	0.	0	4.	+
Iowa	35	1.	+	t	+	0.	0	0.	0	0.	0	8.	3	0.	0	11.	4
*Mo.	200	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
N.D.		t	+	t	+	t	+	t	+	0.	0	2.	+	0.	0	3.	+
Kans.		-	-	1.	+	-	-	-	-	-	-	-	-	0.	0	1.	+
Del.	25	1.	+	0.5	+	-	-	t	+	-	-	t	+	0.	0	3.5	1
Md.	1,160	0.1	2	1.	15	t	+	5.2	78	-	-	5.	75	0.	0	23.	346
Va.	420	1.	5	10.	52	3.	16	2.	10	0.	0	0.	0	0.	0	19.	99
W.Va.		1.	+	2.	+	-	-	t	+	-	-	3.	+	0.	0	9.	+
N.C.	69	3.	3	3.	3	5.	5	-	-	2.	2	5.	5	0.	0	23.	23
*S.C.	315	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Ga.	105	0.1	+	7.	14	0.1	+	5.	10	0.1	+	30.	60	0.	0	47.3	94
Fla.	2,470	-	-	2.	54	t	+	3.	81	1.5	40	-	-	0.	0	8.5	229

Tomatoes (Continued)

State	Production 1,000 °Bushels	Estimated reduction in yield due to diseases: Septoria Blight %	Septoria Blight 1,000 Bushels	Fusarium Wilt %	Fusarium Wilt 1,000 Bushels	Bacterial Wilt %	Bacterial Wilt 1,000 Bushels	Early Blight %	Early Blight 1,000 Bushels	Nailhead Spot %	Nailhead Spot 1,000 Bushels	Blossom-end Rot %	Blossom-end Rot 1,000 Bushels	Curly-top %	Curly-top 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Ky.	162	t	+	3.	6	0.	0	0.	0	t	+	15.	30	0.	0	19.	38
*Tenn.	693	-	-	-	-	-	-	-	-	-	-	-	-	0.	0	-	-
Miss.	1,000	-	-	1.	15	1.	15	1.	15	-	-	20.	301	0.	0	33.	497
Ark.	[illegible]	t	+	t	+	-	-	t	+	-	-	2.	3	0.	0	2.	3
La.	132	t	+	3.	4	t	+	2.	3	-	-	t	+	0.	0	6.	8
Okla.		3.	+	20.	+	2.	+	1.	+	0.5	+	3.	+	0.	0	29.5	+
Texas	3,075	3.	110	5.	183	0.5	18	2.	73	0.	0	5.	183	0.5	18	16.	585
Mont.		0.	0	t	+	0.	0	0.	0	0.	0	t	+	t	+	3.	+
Idaho		0.	0	0.	0	0.	0	0.	0	0.	0	2.	+	25.	+	27.	+
Colo.	475	t	+	t	+	0.	0	2.	11	0.	0	1.	5	3.	16	13.	70
Utah	88	-	-	t	+	-	-	-	-	-	-	t	+	12.	13	18.	19
*Wash.	384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	225	-	-	-	-	-	-	-	-	-	-	-	-	20.	55	20.	55
*Calif.	3,644	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	20,346	1.	142	2.7	350	0.4	62	2.6	357	0.3	44	5.6	771	0.7	102	17.	2,372

° Bushels of 53 pounds.
* Omitted in calculations for U. S. percentage loss.

SNAP BEANS

Table 11. Snap beans for manufacture; estimated reduction in yield due to anthracnose (Colletotrichum lindemuthianum), bacterial blights (Bacterium spp.), mosaic (virus), root rots (various organisms), rust (Uromyces phaseoli typica), and other diseases, 1936.

State	Production Short Tons	Reduction in yield due to diseases: Anthracnose %	Anthracnose Short Tons	Bacterial Blights %	Bacterial Blights Short Tons	Mosaic %	Mosaic Short Tons	Root Rots %	Root Rots Short Tons	Rust %	Rust Short Tons	All Diseases %	All Diseases Short Tons
Maine	2,900	t	+	t	+	-	-	t	+	t	+	t	+
N.H.		t	+	-	-	-	-	-	-	t	+	t	+
N.Y.	10,400	t	+	0.5	54	1.5	162	1.5	162	t	+	3.5	378
N.J.		-	-	-	-	-	-	-	-	1.	+	1.	+
Pa.	2,200	4.	104	0.5	13	4.	104	5.	130	1.	26	15.5	403
Ohio		1.	+	0.5	+	1.	+	0.5	+	t	+	3.	+
Ind.	1,100	-	-	1.	11	-	-	-	-	-	-	1.	11
Ill.		0.3	+	0.3	+	10.	+	1.	+	-	-	11.6	+
Mich.	6,500	0.	0	2.5	167	0.	0	0.1	7	0.	0	2.7	181
Wis.	5,000	0.	0	1.	53	5.	266	t	+	0.	0	6.	319
Minn.		t	+	2.	+	3.	+	t	+	0.	0	6.	+
Iowa		t	+	2.	+	0.	0	0.	0	0.	0	3.	+
Del.	1,100	t	+	-	-	-	-	t	+	-	-	t	+
Md.	13,500	t	+	1.	141	0.5	70	2.5	352	-	-	4.1	577
Va.		0.	0	3.	+	2.	+	3.	+	10.	+	28.	+
N.C.		t	+	2.	+	2.	+	9.	+	1.	+	22.	+
*S.C.	100	-	-	-	-	-	-	-	-	-	-	-	-
Ga.		1.	+	-	-	-	-	-	-	2.	+	3.	+
Fla.		t	+	t	+	-	-	t	+	5.	+	5.	+
Ky.		0.	0	t	+	3.	+	t	+	t	+	4.	+
*Tenn.	1,200	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	1,800	t	+	1.	19	1.	19	-	-	-	-	4.	76
*Ark.	400	-	-	-	-	-	-	-	-	-	-	-	-
La.	700	t	+	4.	30	-	-	2.	15	t	+	6.	45
Okla.		-	-	50.	+	10.	+	8.	+	-	-	78.	+
Texas		t	+	5.	+	8.	+	6.	+	t	+	24.	+
Mont.		0.	0	1.	+	5.	+	1.	+	0.	0	7.	+
Idaho		0.	0	t	+	10.	+	5.	+	0.	0	25.	+
Colo.	1,400	0.	0	20.	354	t	+	t	+	1.	18	21.	372
Utah	2,000	-	-	t	+	2.	41	t	+	0.5	10	2.5	51
*Wash.	2,800	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	7,600	-	-	-	-	-	-	-	-	-	-	5.	400
Calif.	3,700	-	-	-	-	-	-	-	-	1.	37	1.	37
+Other States	6,200												
U.S.	70,600	0.2	104	1.3	842	1.1	662	1.1	666	0.1	91	4.6	2,850

* Omitted in calculations for U. S. percentage loss.

\+ Includes Alabama, Georgia, Florida, Idaho, Illinois, Iowa, Kansas, Kentucky, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, North Carolina, Ohio, Oklahoma, Texas, Vermont, Virginia, West Virginia, and Wyoming.

Table 12. Snap beans for market; estimated reduction in yield due to Anthracnose (Colletotrichum lindemuthianum), bacterial blights (Bacterium spp.), mosaic (virus), root rots (various organisms), rust (Uromyces phaseoli typica), and other diseases, 1936.

State	Production 1,000 Bushels	Reduction in yield due to diseases: Anthracnose %	Anthracnose 1,000 Bushels	Bacterial Blights %	Bacterial Blights 1,000 Bushels	Mosaic %	Mosaic 1,000 Bushels	Root Rots %	Root Rots 1,000 Bushels	Rust %	Rust 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Maine		t	+	t	+	-	-	t	+	t	+	t	+
N.H.		t	+	-	-	-	-	-	-	t	+	t	+
Mass.		0.5	+	3.	+	2.	+	6.	+	t	+	11.5	+
Conn.		t	+	t	+	t	+	-	-	0.5	+	1.	+
N.Y.	232	t	+	0.5	1	1.5	4	1.5	4	t	+	3.5	9
N.J.	1,341	-	-	-	-	-	-	-	-	1.	14	1.	14
Pa.	284	4.	13	0.5	2	4.	13	5.	17	1.	3	15.5	51
Ohio		1.	+	0.5	+	1.	+	0.5	+	t	+	3.	+
Ind.		-	-	1.	+	-	-	-	-	-	-	1.	+
Ill.	54	0.3	+	0.3	+	10.	6	1.	1	-	-	11.6	7
Mich.	51	0.	0	2.5	1	0.	0	0.1	+	0.	0	2.7	1
Wis.		0.	0	1.	+	5.	+	t	+	0.	0	6.	+
Minn.		t	+	2.	+	3.	+	t	+	0.	0	6.	+
Iowa		t	+	2.	+	0.	0	0.	0	0.	0	3.	+
N.D.		t	+	0.5	+	2.5	+	t	+	0.	0	3.	+
Del.	18	t	+	-	-	-	-	t	+	-	-	t	+
Md.	322	t	+	1.	3	0.5	2	2.5	8	-	-	4.1	13
Va.	617	0.	0	3.	26	2.	17	3.	26	10.	86	28.	241
W.Va.		1.	+	5.	+	2.	+	2.	+	t	+	10.	+
N.C.	369	t	+	2.	10	2.	10	9.	43	-	-	23.	111
*S.C.	190	-	-	-	-	-	-	-	-	-	-	-	-
Ga.	292	1.	2	-	-	-	-	-	-	2.	4	3.	6
Fla.	4,300	t	+	10.	694	-	-	1.	69	22.	1,126	38.	2,636
Ky.		0.	0	t	+	3.	+	t	+	t	+	4.	+
*Tenn.	49	-	-	-	-	-	-	-	-	-	-	-	-
*Ala.	25	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	430	t	+	1.	4	1.	4	-	-	-	-	4.	17
*Ark.	71	-	-	-	-	-	-	-	-	-	-	-	-
La.	756	t	+	4.	32	-	-	2.	16	t	+	6.	48
Okla.		-	-	50.	+	10.	+	8.	+	-	-	78.	+
Texas	538	t	+	5.	35	8.	57	6.	42	t	+	24.	169
Mont.		0.	0	1.	+	5.	+	1.	+	0.	0	7.	+
Idaho		0.	0	t	+	10.	+	5.	+	0.	0	25.	+
Wyo.		0.	0	5.	+	5.	+	4.	+	-	-	14.	+
Colo.	300	0.	0	20.	76	t	+	t	+	1.	4	21.	80
N.M.		0.	0	-	-	-	-	-	-	1.	+	1.	+
Utah		0.	0	t	+	2.	+	t	+	-	-	2.5	+
Oreg.		0.	0	-	-	-	-	-	-	-	-	5.	+
Calif.	1,870	0.	0	-	-	-	-	-	-	1.	19	1.	19
U.S.	12,019	0.1	15	5.9	884	0.7	113	1.5	226	11.	1,656	22.7	3,422

• Bushels of 30 pounds.
* Omitted in calculations for U. S. percentage loss.

DRY BEANS

Table 13. Estimated reduction in yield of dry beans due to anthracnose (*Colletotrichum lindemuthianum*), bacterial blights (*Bacterium* spp.), mosaic (virus), root rots (various organisms), rust (*Uromyces phaseoli typica*), and other diseases, 1936.

State	Production 1,000 °Bags	Estimated reduction in yield due to diseases: Anthracnose %	Anthracnose 1,000 Bags	Bacterial Blight %	Bacterial Blight 1,000 Bags	Mosaic %	Mosaic 1,000 Bags	Root Rots %	Root Rots 1,000 Bags	Rust %	Rust 1,000 Bags	All Diseases %	All Diseases 1,000 Bags
Maine	70	t	+	t	+	t	+	t	+	t	+	t	+
*Vt.	18	-	-	-	-	-	-	-	-	-	-	-	-
N.Y.	852	t	+	0.5	4	1.5	13	1.5	13	t	+	3.5	30
Mich.	2,656	0.	0	2.5	68	0.	0	0.1	3	0.	0	2.7	74
Wis.	12	0.	0	1.	+	5.	1	t	+	0.	0	6.	1
Minn.	6	t	+	2.	+	3.	+	t	+	0.	0	6.	+
*Nebr.	113	-	-	-	-	-	-	-	-	-	-	-	-
*Kans.	7	-	-	-	-	-	-	-	-	-	-	-	-
Mont.	168	0.	0	1.	2	5.	9	1.	2	0.	0	7.	13
Idaho	1,248	0.	0	t	+	10.	166	5.	83	0.	0	25.	415
Wyo.	460	0.	0	5.	27	5.	27	4.	21	-	-	14.	75
Colo.	1,091	0.	0	20.	276	t	+	t	+	1.	14	21.	290
N.M.	288	0.	0	-	-	-	-	-	-	1.	3	1.	3
*Ariz.	46	0.	0	-	-	-	-	-	-	-	-	-	-
Oreg.	6	0.	0	-	-	-	-	-	-	-	-	5.	+
Calif.	4,081	0.	0	-	-	-	-	-	-	1.	41	1.	41
U. S.	11,122	t	+	3.2	377	1.8	216	1.	122	0.5	58	7.9	942

° Bags of 100 pounds.
* Omitted in calculations for U. S. percentage loss.

GREEN PEAS

Table 14. Green peas for manufacture; estimated reduction in yield due to bacterial blight (*Bacterium pisi*), Fusarium wilt (*Fusarium orthoceras pisi*), Ascochyta blight (*Mycosphaerella pinodes* and *Ascochyta* spp.), root rots (various organisms), and other diseases, 1936.

State	Production Short Tons	Estimated reduction in yield due to diseases: Bacterial Blight %	Bacterial Blight Short Tons	Fusarium Wilt %	Fusarium Wilt Short Tons	Ascochyta Blight %	Ascochyta Blight Short Tons	Root Rots %	Root Rots Short Tons	All Diseases %	All Diseases Short Tons
Maine	1,910	-	-	-	-	t	+	t	+	t	+
N.Y.	13,180	-	-	t	+	t	+	8.	1,146	8.	1,146
Pa.	4,040	-	-	1.	48	t	+	15.	722	16.	770
Ohio	2,800	t	+	1.	29	0.5	15	2.	58	3.5	102
*Ind.	6,120	-	-	-	-	-	-	-	-	-	-
Ill.	12,300	-	-	-	-	-	-	1.	127	3.	381
Mich.	7,030	0.1	7	1.	72	0.1	7	1.	72	2.3	165
Wis.	43,200	t	+	1.	448	0.	0	2.	895	3.5	1,567
*Minn.	14,000	-	-	-	-	-	-	-	-	-	-
Iowa		0.	0	2.	+	0.	0	0.	0	2.	+
Del.	1,500	-	-	-	-	t	+	t	+	t	+
Md.	11,120	0.2	24	t	+	0.3	35	5.	588	5.5	647
Va.	3,020	t	+	-	-	-	-	2.	62	2.	62
Okla.		4.	+	2.	+	-	-	-	-	9.	+
Texas		t	+	t	+	0.	0	10.	+	15.	+
Mont.	2,140	t	+	t	+	t	+	8.	186	8.	186
Idaho		t	+	1.	+	0.	0	10.	+	11.	+
Wyo.		t	+	t	+	-	-	t	+	t	+
Colo.	3,510	t	+	0.	0	5.	240	20.	962	27.	1,298
Utah	12,060	-	-	t	+	-	-	5.	645	6.5	838
*Wash.	26,250	-	-	-	-	-	-	-	-	-	-
Oreg.	12,840	0.	0	t	+	1.	140	-	-	8.5	1,192
*Other States	10,360										
U. S.	187,380	t	31	0.4	597	0.3	437	3.9	5,463	6.	8,354

* Omitted in calculations for U. S. percentage loss.

** Includes California, Idaho, Iowa, Kansas, Nebraska, New Jersey, Oklahoma, Tennessee, Texas, and Wyoming.

GREEN PEAS

Table 15. Green peas for market; estimated reduction in yield due to bacterial blight (Bacterium pisi), Fusarium wilt (Fusarium orthoceras pisi), Ascochyta blight (Mycosphaerella pinodes and Ascochyta spp.), root rots (various organisms), and other diseases, 1936.

State	Production 1,000 °Bushels	Estimated reduction in yield due to diseases: Bacterial Blight %	Bacterial Blight 1,000 Bushels	Fusarium Wilt %	Fusarium Wilt 1,000 Bushels	Ascochyta Blight %	Ascochyta Blight 1,000 Bushels	Root Rots %	Root Rots 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Maine		-	-	-	-	t	+	t	+	t	+
Mass.		0.5	+	4.	+	2.	+	25.	+	31.5	+
Conn.		-	-	-	-	t	+	t	+	1.5	+
N. Y.	321	-	-	t	+	t	+	8.	28	8.	28
*N. J.	180	-	-	-	-	-	-	-	-	-	-
Pa.		-	-	1.	+	t	+	15.	+	16.	+
Ohio		t	+	1.	+	0.5	+	2.	+	3.5	+
Ill.		-	-	-	-	-	-	1.	+	3.	+
Mich.		0.1	+	1.	+	0.1	+	1.	+	2.3	+
Wis.		t	+	1.	+	0.	0	2.	+	3.5	+
Iowa		0.	0	2.	+	0.	0	0.	0	2.	+
N. D.		-	-	t	+	0.	0	0.5	+	0.5	+
Del.		-	-	-	-	t	+	t	+	t	+
Md.	11	0.2	+	t	+	0.3	+	5.	1	5.5	1
Va.	88	t	+	-	-	-	-	2.	2	2.	2
N. C.	190	1.	2	3.	6	3.	6	1.	2	10.	20
*S. C.	175	-	-	-	-	-	-	-	-	-	-
Ga.		-	-	-	-	5.	+	-	-	10.	+
Fla.	508	1.	6	-	-	1.	6	10.	61	17.	104
*Miss.	192	t	+	-	-	-	-	-	-	-	-
La.	52	-	-	-	-	2.	1	-	-	2.	1
Okla.		4.	+	2.	+	-	-	-	-	9.	+
Texas	312	t	+	t	+	0.	0	10.	37	15.	55
Mont.		t	+	t	+	t	+	8.	+	8.	+
Idaho	440	t	+	1.	5	0.	0	10.	49	11.	54
Wyo.		t	+	t	+	-	-	t	+	t	+
Colo.	760	t	+	0.	0	5.	52	20.	208	27.	281
*Ariz.	34	-	-	-	-	-	-	-	-	-	-
Utah		-	-	t	+	-	-	5.	+	6.5	+
*Wash.	1,140	-	-	-	-	-	-	-	-	-	-
Oreg.	105	0.	0	t	+	1.	1	-	-	8.5	10
*Calif.	4,660	-	-	-	-	-	-	-	-	-	-
U. S.	9,168	0.2	8	0.3	11	2.	66	11.6	388	16.6	556

° Bushels of 30 pounds.
* Omitted in calculations for U. S. percentage loss.

Table 16. Estimated reduction in yield of cotton due to Anthracnose (*Glomerella gossypii*), angular leaf spot (*Bacterium malvacearum*), wilt (*Fusarium vasinfectum*), root knot (*Heterodera marioni*), root rot (*Phymatotrichum omnivorum*), malnutrition (non-parasitic), and other diseases, 1936.

State	Production 1,000 °Bales	Estimated reduction in yield due to diseases: Anthracnose %	Anthracnose 1,000 Bales	Angular Leaf Spot %	Angular Leaf Spot 1,000 Bales	Wilt %	Wilt 1,000 Bales	Root Knot %	Root Knot 1,000 Bales	Root Rot %	Root Rot 1,000 Bales	Malnutrition %	Malnutrition 1,000 Bales	All Diseases %	All Diseases 1,000 Bales
*Mo.	310	-	-	-	-	-	-	-	-	0.	0	-	-	-	-
Va.	34	2.	1	4.	2	-	-	-	-	0.	0	1.	+	8.	3
N.C.	612	t	+	3.	25	5.	42	2.	17	0.	0	17.	142	27.	226
*S.C.	820	-	-	-	-	-	-	-	-	0.	0	-	-	-	-
Ga.	1,090	0.1	1	2.	26	8.	103	0.5	6	0.	0	2.	26	15.6	201
*Fla.	32	-	-	-	-	-	-	-	-	0.	0	-	-	-	-
Tenn.	431	t	+	t	+	4.	18	-	-	0.	0	-	-	4.	18
Ala.	1,140	t	+	t	+	8.	111	0.5	7	0.	0	6.	83	17.5	242
Miss.	1,910	t	+	t	+	3.	62	-	-	0.	0	2.	42	8.	166
Ark.	1,295	t	+	1.	15	10.	152	1.	15	t	+	3.	46	15.	228
La.	763	2.	18	1.	9	4.	35	t	+	0.	0	5.	44	14.	124
Okla.	290	-	-	-	-	-	-	1.	3	3.	10	2.	7	11.	36
Texas	2,945	t	+	2.	72	3.	108	0.5	18	8.	289	t	+	18.5	668
N.M.	110	-	-	3.	4	-	-	-	-	0.1	+	-	-	6.1	8
Ariz.	170	-	-	1.	2	-	-	0.5	1	5.	10	4.	8	12.5	25
Calif.	440	-	-	-	-	-	-	1.	5	-	-	-	-	3.	14
* All Others	15														
U. S.	12,407	0.2	20	1.2	155	4.8	631	0.5	72	2.3	309	3.	398	14.8	1,959

* Omitted in calculations for U. S. percentage loss.

° 500 pounds.

Table 17. Estimated reduction in yield of sugar beet due to nematode (*Heterodera schachtii*), curly top (virus), leaf spot (*Cercospora beticola*), Phoma rot (*Phoma betae*), and other diseases, 1936.

State	Production 1,000 Short Tons	Sugar Beet Nematode %	Sugar Beet Nematode 1,000 Short Tons	Curly-top %	Curly-top 1,000 Short Tons	Leaf Spot %	Leaf Spot 1,000 Short Tons	Phoma Rot %	Phoma Rot 1,000 Short Tons	All Diseases %	All Diseases 1,000 Short Tons
Ohio	272	0.	0	0.	0	1.5	5	0.5	2	12.	38
Mich.	936	0.	0	0.	0	0.1	1	1.5	15	5.1	51
Wis.		0.	0	0.	0	8.	+	t	+	8.	+
Minn.		0.	0	0.	0	2.	+	t	+	12.	+
Iowa		0.	0	0.	0	2.	+	1.	+	10.	+
Nebr.	783	1.	8	0.	0	t	+	-	-	5.	41
Mont.	649	t	+	t	+	1.	7	-	-	6.	42
Idaho	724	-	-	5.	38	-	-	-	-	5.	38
Wyo.	482	-	-	t	+	t	+	t	+	7.5	39
Colo.	2,227	1.	25	t	+	5.	125	t	+	11.	275
Utah	511	0.5	3	5.	27	t	+	0.5	3	6.5	36
Calif.	1,939	5.	111	5.	111	-	-	-	-	13.	289
Other States	654										
U. S.	9,177	1.6	147	1.9	176	1.5	138	0.2	20	9.1	849

Table 18. Estimated reduction in yield of pear due to blight (*Bacillus amylovorus*), scab (*Venturia pyrina*), leaf blight (*Fabraea maculata* and *Mycosphaerella sentina*), and other diseases, 1936.

State	Production 1,000 Bushels	Estimated reuction in yield due to diseases: Blight %	Blight 1,000 Bushels	Scab %	Scab 1,000 Bushels	Leaf Blight %	Leaf Blight 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Maine	5	-	-	-	-	-	-	-	-
N. H.	4	-	-	-	-	-	-	-	-
Vt.	2	-	-	-	-	-	-	-	-
Mass.	42	5.	2	t	+	t	+	5.	2
R. I.	7	-	-	t	+	-	-	-	-
Conn.	18	2.	+	0.5	+	0.5	+	4.	1
N. Y.	776	5.	41	t	+	t	+	5.	41
N. J.	94	-	-	-	-	-	-	-	-
Pa.	279	15.	52	1.	3	2.	7	19.	65
Ohio	174	3.5	6	0.5	1	0.1	+	4.1	7
Ind.	56	8.	5	t	+	2.	1	10.	6
Ill.	185	10.	21	0.	0	1.	2	11.	23
Mich.	763	2.	16	t	+	0.	0	2.	16
Wis.		2.	+	5.	+	0.	0	7.	+
Minn.		t	+	-	-	-	-	t	+
Iowa	33	0.	0	0.	0	0.	0	0.	0
Mo.	67	-	-	-	-	t	+	t	+
Nebr.	13	-	-	-	-	-	-	-	-
Kans.	22	-	-	-	-	-	-	-	-
Del.	38	t	+	-	-	8.	3	8.	3
Md.	110	8.	10	0.5	1	2.	2	10.5	13
Va.	274	2.	6	t	+	t	+	2.5	7
W. Va.	16	1.	+	1.	+	2.	+	5.	1
N. C.	181	8.	17	0.	0	5.	11	16.	34
S. C.	82	10.	9	0.	0	2.	2	12.	11
Ga.	189	10.	22	0.	0	2.	4	12.	26
Fla.	67	10.	7	0.	0	-	-	10.	7
Ky.	50	8.	4	-	-	-	-	8.	4
Tenn.	123	8.	11	-	-	-	-	8.	11
Ala.	295	10.	33	-	-	-	-	10.	33
Miss.	335	20.	87	-	-	-	-	23.	100
Ark.	61	t	+	-	-	-	-	t	+
La.	77	10.	9	-	-	-	-	10.	9
Okla.	10	-	-	1.	+	1.	+	2.	+
Texas	325	10.	38	0.	0	0.	0	15.	57
Idaho	58	10.	7	0.	0	0.	0	11.	8
Colo.	333	t	+	0.	0	0.	0	t	+
N. M.	27	-	-	-	-	-	-	-	-
Ariz.	11	-	-	-	-	-	-	-	-
Utah	91	3.	3	-	-	-	-	4.	4
Nev.	8	-	-	-	-	-	-	-	-
Wash.	5,400	t	+	-	-	-	-	t	+
Oreg.	3,760	t	+	-	-	-	-	t	+
Calif.	9,667	t	+	-	-	-	-	t	+
U. S.	24,128	1.6	406	t	5	0.1	32	1.9	489

APPLE

Table 19. Estimated reduction in yield of apple due to bitter rot (Glomerella cingulata), black rot (Physalospora obtusa), blotch (Phyllosticta solitaria), cedar rust (Gymnosporangium spp.), blight (Bacillus amylovorus), scab (Venturia inaequalis), and other diseases, 1936.

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases: Bitter Rot %	Bitter Rot 1,000 Bushels	Black Rot %	Black Rot 1,000 Bushels	Blotch %	Blotch 1,000 Bushels	Cedar Rust %	Cedar Rust 1,000 Bushels	Blight %	Blight 1,000 Bushels	Scab %	Scab 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Maine	576	-	-	-	-	-	-	t	+	-	-	2.	12	3.	18
N. H.	292	t	+	t	+	-	-	-	-	t	+	2.	6	2.	6
*Vt.	204	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.	1,716	t	+	1.	19	-	-	0.5	9	0.5	9	2.	38	9.	169
R. I.	207	-	-	1.	2	1.	2	2.	6	-	-	-	-	9.	21
Conn.	796	t	+	1.	9	0.	0	1.	9	1.	9	2.5	21	6.5	57
N. Y.	10,200	-	-	t	+	0.	0	0.5	53	1.	107	2.	214	4.5	481
N. J.	2,850	t	+	3.	92	t	+	t	+	2.	61	2.	61	7.	214
Pa.	7,072	t	+	3.	267	t	+	0.5	44	3.	267	10.	890	20.5	1,824
Ohio	2,660	t	+	0.1	3	0.1	3	0.5	14	2.5	70	1.5	42	4.7	132
Ind.	487	t	+	t	+	t	+	3.	16	5.	27	1.	5	9.	48
Ill.	1,696	0.	0	1.	18	t	+	2.	36	1.	18	1.	18	5.	90
Mich.	6,864	0.	0	t	+	0.	0	0.	0	t	+	2.	140	2.	140
Wis.	1,100	0.	0	t	+	t	+	1.	12	2.	24	4.	47	7.	83
Minn.	454	-	-	-	-	-	-	0.5	2	t	+	0.5	2	1.	4
Iowa	901	0.	0	1.	10	0.5	5	1.	10	1.	10	5.	50	9.5	95
Mo.	649	-	-	0.5	3	t	+	t	+	t	+	0.1	1	1.6	11
N. D.		0.	0	0.	0	0.	0	t	+	1.5	+	t	+	2.5	+
*S. D.	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Nebr.	236	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	225	-	-	-	-	-	-	-	-	-	-	1.	2	1.	2
Del.	1,365	t	+	2.	29	-	-	-	-	t	+	3.	44	6.	88
Md.	1,810	0.5	10	1.5	30	0.5	10	1.	20	1.5	30	2.	40	8.5	170
Va.	7,750	t	+	t	+	t	+	2.5	208	2.	167	1.5	125	7.	583
W. Va.	3,520	t	+	t	+	t	+	t	+	1.	37	2.	75	6.	224
N. C.	2,590	1.	31	t	+	1.	31	t	+	8.	247	1.	31	16.	494

Apple (Continued)

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases: Bitter Rot %	Bitter Rot 1,000 Bushels	Black Rot %	Black Rot 1,000 Bushels	Blotch %	Blotch 1,000 Bushels	Cedar Rust %	Cedar Rust 1,000 Bushels	Blight %	Blight 1,000 Bushels	Scab %	Scab 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
S. C.	220	1.	2	1.	2	t	+	-	-	-	-	-	-	2.	4
Ga.	851	1.	9	2.	18	0.1	1	0.1	1	0.1	1	3.	27	6.3	57
Ky.	572	t	+	t	+	t	+	t	+	2.	12	3.	18	6.	36
*Tenn.	1,140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ala.	576	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Miss.	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	455	0.	0	t	+	t	+	t	+	t	+	t	+	2.	9
*La.	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Okla.	15	-	-	10.	2	20.	4	-	-	-	-	3.	1	33.	7
Texas	105	t	+	0.1	+	2.	2	t	+	5.	6	0.	0	10.1	12
Mont.	112	0.	0	0.	0	0.	0	0.	0	1.	1	t	+	1.	1
Idaho	3,102	0.	0	0.	0	0.	0	0.	0	0.5	16	t	+	2.5	80
*Wyo.	20	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
Colo.	1,972	0.	0	0.	0	0.	0	-	-	t	+	0.	0	t	+
*N. M.	812	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
*Ariz.	70	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
Utah	708	-	-	0.	0	0.	0	-	-	-	-	1.	7	2.	14
*Nev.	53	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
*Wash.	27,520	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
*Oreg.	4,368	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
*Calif.	8,946	-	-	0.	0	0.	0	-	-	-	-	-	-	-	-
U. S.	108,031	0.1	52	0.7	504	0.1	58	0.6	440	1.6	1,119	2.8	1,917	7.5	5,174

* Omitted in calculations for U. S. percentage loss.

Table 20. Estimated reduction in yield of peach due to leaf curl (*Taphrina deformans*), brown rot (*Sclerotinia fructicola*), virus diseases, scab (*Cladosporium carpophilum*), and other diseases, 1936.

State	Production 1,000	Estimated reduction in yield due to diseases: Leaf Curl %	Leaf Curl 1,000 Bushels	Brown Rot %	Brown Rot 1,000 Bushels	Virus Diseases %	Virus Diseases 1,000 Bushels	Scab %	Scab 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
*N.H.	8	-	-	-	-	-	-	-	-	-	-
Mass.	105	0.5	1	1.	1	1.	1	1.	1	3.5	4
R.I.	28	1.	+	2.	1	-	-	t	+	3.	1
Conn.	158	0.5	1	1.5	2	0.5	1	1.	2	4.5	8
N.Y.	700	t	+	1.	7	t	+	t	+	1.	7
N.J.	1,380	1.	15	6.	89	t	+	t	+	7.	104
Pa.	576	1.	6	6.	39	0.5	3	1.	6	10.5	67
Ohio	168	t	+	0.1	+	t	+	0.5	1	0.6	1
*Ind.	12	-	-	-	-	-	-	-	-	-	-
Ill.	315	t	+	1.	3	-	-	0.	0	1.	3
Mich.	1,334	0.	0	t	+	1.	13	t	+	1.	13
Iowa	10	0.	0	0.	0	0.	0	0.	0	0.	0
Mo.	66	t	+	-	-	-	-	-	-	t	+
*Nebr.	4	-	-	-	-	-	-	-	-	-	-
*Kans.	17	-	-	-	-	-	-	-	-	-	-
Del.	514	0.5	3	1.	5	t	+	1.	5	2.5	13
Md.	363	2.	8	6.	24	0.5	2	1.	4	9.5	38
Va.	570	1.	6	2.	12	t	+	1.	6	4.	24
W.Va.	100	2.	2	1.	1	t	+	1.	1	5.	5
N.C.	1,800	t	+	7.	147	-	-	1.	21	14.	294
*S.C.	1,525	-	-	-	-	-	-	-	-	-	-
Ga.	5,751	t	+	7.	458	-	-	0.1	7	12.1	792
*Fla.	67	-	-	-	-	-	-	-	-	-	-
Ky.	110	t	+	2.	2	0.	0	t	+	2.	2
Tenn.	840	-	-	2.	17	-	-	-	-	2.	17
Ala.	1,040	-	-	2.	21	-	-	-	-	2.	21
Miss.	759	-	-	5.	40	-	-	-	-	5.	40
Ark.	825	t	+	t	+	-	-	t	+	t	+
*La.	228	-	-	-	-	-	-	-	-	-	-
Okla.	16	0.	0	10.	2	-	-	-	-	10.	2
Texas	1,200	t	+	2.	30	2.	30	5.	74	19.	282
Idaho	139	t	+	0.	0	0.	0	0.	0	7.	10
Colo.	1,213	0.	0	1.	13	3.	38	0.	0	4.	51
*N.M.	65	-	-	-	-	-	-	-	-	-	-
*Ariz.	47	-	-	-	-	-	-	-	-	-	-
Utah	748	-	-	-	-	-	-	-	-	15.	132
*Nev.	8	-	-	-	-	-	-	-	-	-	-
*Wash.	1,424	-	-	-	-	-	-	-	-	-	-
Oreg.	258	-	-	12.5	37	-	-	-	-	12.5	37
*Calif.	21,627	-	-	-	-	-	-	-	-	-	-
U. S.	46,118	0.2	42	4.1	951	0.4	88	0.6	128	8.6	1,968

* Omitted in calculations for U. S. percentage loss.

Table 21. Estimated reduction in yield of cherry due to brown rot (*Sclerotinia fructicola*), leaf spot (*Coccomyces hiemalis*), and other diseases, 1936.

State	Production Tons	Estimated reduction in yield due to diseases: Brown Rot %	Brown Rot Tons	Leaf Spot %	Leaf Spot Tons	All Diseases %	All Diseases Tons
Mass.		10.	+	0.5	+	10.5	+
R. I.		25.	+	t	+	25.	+
Conn.		2.	+	1.	+	3.5	+
N. Y.	12,840	t	+	t	+	1.	130
N. J.		2.	+	4.	+	7.	+
Pa.	3,630	10.	437	5.	219	17.	743
Ohio	770	0.1	1	0.2	2	0.3	3
Ill.		t	+	t	+	t	+
Mich.	27,450	t	+	t	+	t	+
Wis.	1,700	t	+	4.	71	4.	71
Iowa		0.	0	1.	+	1.	+
Del.		1.	+	5.	+	6.	+
Md.		3.	+	3.	+	6.	+
Va.		2.	+	3.	+	5.	+
W. Va.		1.	+	5.	+	7.	+
N. C.		15.	+	t	+	17.	+
Ark.		t	+	t	+	1.	+
Okla.		2.	+	2.	+	4.	+
Texas		t	+	-	-	1.	+
*Mont.	130	-	-	-	-	-	-
Idaho	1,890	0.	0	0.	0	1.	19
Colo.	810	0.	0	0.	0	0.	0
Utah	5,330	-	-	-	-	5.	281
*Wash.	15,000	-	-	-	-	-	-
Oreg.	14,500	12.5	2,071	-	-	12.5	2,071
*Calif.	22.000	-	-	-	-	-	-
U. S.	106,050	3.2	2,509	0.4	292	4.3	3,318

* Omitted in calculations for U. S. percentage loss.

Table 22. Estimated reduction in yield due to black rot (*Guignardia bidwellii*), and other diseases, 1936.

State	Production Tons	Estimated reduction in yield due to diseases: Black Rot %	Black Rot Tons	Other Diseases %	Other Diseases Tons	All Diseases %	All Diseases Tons
		East of Rocky Mountains					
*Maine	10	-	-	-	-	-	-
*N. H.	20	-	-	-	-	-	-
*Vt.	10	-	-	-	-	-	-
Mass.	320	2.	7	4.	14	6.	21
R. I.	200	1.	2	t	+	1.	2
Conn.	1,160	1.	12	1.	12	2.	24
N. Y.	41,800	1.	440	4.	1,760	5.	2,200
N. J.	2,600	5.	144	5.	144	10.	288
Pa.	15,800	15.	2,855	2.	381	17.	3,236
Ohio	22,000	1.5	335	0.1	22	1.6	357
Ind.	1,700	t	+	t	+	t	+
Ill.	3,500	t	+	-	-	t	+
Mich.	37,400	t	+	1.	378	1.	378
Wis.	240	1.	2	2.	5	3.	7
Minn.	210	0.	0	t	+	t	+
Iowa	3,200	t	+	t	+	t	+
Mo.	4,700	t	+	-	-	t	+
*Nebr.	1,000	-	-	-	-	-	-
*Kans.	1,100	-	-	-	-	-	-
Del.	2,500	3.	77	t	+	3.	77
Md.	690	8.	61	2.	15	10.	76
Va.	1,500	15.	281	5.	94	20.	375
W. Va.	540	3.	18	7.	42	10.	60
N. C.	4,500	3.	147	5.	245	8.	392
*S. C.	980	-	-	-	-	-	-
Ga.	770	10.	103	15.	154	25.	257
Fla.	1,090	25.	389	5.	78	30.	467
Ky.	950	t	+	-	-	t	+
Tenn.	1,050	t	+	-	-	t	+
Ala.	580	5.	32	5.	32	10.	64
Miss.	230	15.	46	10.	31	25.	77
Ark.	10,600	t	+	1.	107	1.	107
*La.	60	-	-	-	-	-	-
Okla.	1,000	10.	125	10.	125	20.	250
Texas	1,500	15.	281	5.	94	20.	375
Reporting Area	165,510	3.1	5,357	2.2	3,733	5.3	9,090

* Omitted in calculations for total percentage loss.

Table 23. Estimated reduction in yield of strawberry due to leaf spot (*Mycosphaerella fragariae*), leaf scorch (*Diplocarpon earliana*), dwarf (*Aphelenchoides fragariae*), black root and root rot (various causes), and other diseases and estimated loss from fruit rots, 1936.

State	Production 1,000 Crates	Estimated reduction in yield due to diseases: Leaf Spot %	Leaf Spot 1,000 Crates	Leaf Scorch %	Leaf Scorch 1,000 Crates	Dwarf %	Dwarf 1,000 Crates	Black Root & Root Rots %	Black Root & Root Rots 1,000 Crates	All Diseases %	All Diseases 1,000 Crates	Fruit Rots %	Fruit Rots 1,000 Crates
Maine		t	+	-	-	-	-	t	+	-	-	-	-
Mass.		1.	+	-	-	t	+	10.	+	11.	+	10.	+
R.I.		5.	+	-	-	-	-	-	-	5.	+	-	-
Conn.		1.	+	1.	+	1.	+	-	-	4.5	+	-	-
*N.Y.	252	t	+	-	-	-	-	-	-	-	-	-	-
*N.J.	187	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	286	1.	3	0.5	2	0.	0	10.	32	11.5	37	-	-
Ohio	240	0.2	1	-	-	0.	0	1.	2	1.2	3	-	-
*Ind.	135	t	+	-	-	0.	0	-	-	-	-	-	-
Ill.	252	t	+	0.	0	0.	0	5.	13	5.	13	-	-
Mich.	770	t	+	t	+	0.	0	10.	86	10.	86	-	-
Wis.	94	t	+	t	+	0.	0	4.	4	8.	8	-	-
Minn.		t	+	-	-	0.	0	25**	+	25.	+	-	-
Iowa	30	3.	1	0.	0	0.	0	1.	+	5.	2	-	-
Mo.	301	t	+	-	-	-	-	-	-	1.	3	-	-
Kans.	40	t	+	-	-	-	-	-	-	t	+	1.	+
Del.	182	t	+	t	+	-	-	-	-	10.	20	-	-
Md.	338	1.	4	1.5	6	t	+	7.	26	9.5	36	3.	10
Va.	427	10.	61	5.	31	-	-	15.	92	30.	184	-	-
W.Va.		t	+	t	+	-	-	2.	+	5.	+	-	-
N.C.	519	3.	19	3.	19	5.	31	-	-	16.	100	-	-
*S.C.	38	-	-	-	-	-	-	-	-	-	-	-	-
*Ga.	41	-	-	-	-	-	-	-	-	-	-	-	-
*Fla.	445	-	-	-	-	-	-	-	-	-	-	25.	111
Ky.	189	t	+	-	-	0.	0	-	-	t	+	-	-
*Tenn.	437	-	-	-	-	-	-	-	-	-	-	-	-
*Ala.	184	-	-	-	-	-	-	-	-	-	-	-	-
*Miss.	22	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	496	t	+	t	+	t	+	-	-	1.	5	-	-
La.	1,243	10.	148	2.	30	t	+	-	-	16.	237	3.	37
Okla.	15	0.5	+	3.	1	-	-	15.	3	28.5	6	-	-
Texas	156	1.	2	t	+	t	+	10.	19	16.	30	-	-
Mont.		t	+	0.	0	0.	0	25.	+	25.	+	-	-
Idaho		t	+	0.	0	0.	0	5.	+	15.	+	-	-
Wyo.		t	+	0.	0	0.	0	t	+	t	+	-	-
Colo.		0.	0	0.	0	0.	0	15.	+	15.	+	-	-
Utah	55	-	-	-	-	0.	0	15.	11	23.	17	-	-
*Wash.	800	-	-	-	-	-	-	-	-	-	-	-	-
*Oreg.	1,142	-	-	-	-	-	-	-	-	-	-	-	-
*Calif.	694	-	-	-	-	-	-	-	-	-	-	-	-
U.S.	10,010	3.7	239	1.4	89	0.5	31	4.5	288	12.3	787	-	-

* Omitted in calculations for U. S. percentage loss.
** Includes winter injury.